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10/719,881

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EXAMINER

SHERMAN, STEPHEN G

ART UNIT

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2629

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

**Application No.**

10/719,881

**Applicant(s)**

MATTHIJS ET AL.

**Examiner**

Stephen G. Sherman

**Art Unit**

2629

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 27 June 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 December 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

1. This office action is in response to the amendment filed 27 June 2007. Claims 1-15 are pending.

### ***Response to Arguments***

2. Applicant's arguments with respect to claims 1-15 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Objections***

3. Claims 11, 14 and 15 are objected to because of the following informalities:

Claims 11 and 14 do not have periods at the end of the claims. Also, in the amendment filed, there is no beginning to claim 15. Claim 14 ends without a period on the bottom of page 2 of the claims, then on page three there is text that represents part of the previous claim 15 that was amended, however, the full claim is not presented. For examination purposes, the examiner will assume that the beginning of claim 15 is the same as was previously presented and that the only parts amended are those shown on page 3 of the claims. Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 2, 5 and 12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

***Regarding claim 2***, the claim recites the limitation “wherein the copy is a hard copy or an electronic copy” which is indefinite because in claim 1 from which claim 2 depends, there is an option of “modulating the operation...on the actual display” or “adapting the image content...in a copy of said image”. Since there is an option in claim 1, the method does not need to contain the limitation “adapting the image content...in a copy of said image”, which makes claim 2 indefinite because if the first option is chosen then there is no copy of said image. From the language of claim 2, it is unclear as to whether the intention is to make the limitations in claim 1 an option or not.

***Regarding claim 5***, the claim recites the limitation “wherein, indicating, emphasizing or warning for the presence of at least one defective pixel comprises visually marking the at least one defective pixel on said matrix display” which is indefinite because in claim 1 from which claim 2 depends, there is an option of “modulating the operation...on the actual display” or “adapting the image content...in a

copy of said image". Since there is an option in claim 1, the method does not need to contain the limitation "modulating the operation...on the actual display", which makes claim 5 indefinite because if the second option is chosen then there is no modulating the operation on the matrix display. From the language of claim 5, it is unclear as to whether the intention is to make the limitation in claim 1 an option or not.

**Regarding claim 12**, this claim is indefinite for similar reasons as claim 5, since claim 12 recites the limitation "marking means for visually marking the defective pixels on said matrix display, while claim 9 presents the options similar to claim 1.

### ***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1, 3-4, 8-11 and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Murakami (US 5,982,946).

**Regarding claim 1**, Murakami discloses a method for avoiding misinterpretation of an image displayed on a matrix display due to defective pixels in the matrix display, the method comprising:

obtaining information on the presence and the location of the defective pixels in said matrix display (Figure 4 and column 15, lines 8-20, which explain that the user observes the image and designates an area which comprises a defective pixel such that the location and presence of defective pixels is obtained.), and on the basis of this information,

modulating the operation of said matrix display so as to indicate, emphasize or warn for the presence of said defective pixels on the actual display of said image (Figure 4 and column 15, lines 24-42, which explain that based upon the area designated by the user, an evaluation area parameter ER is displayed which emphasizes the presence of defective pixels on the actual display of the digital image.),

or

adapting the image content of the defective pixels or of pixels in the neighborhood of the defective pixels so as to indicate, emphasize or warn for the presence of said defective pixels in a copy of said image.

**Regarding claim 3**, Murakami discloses a method according to claim 1, wherein the information is obtained from data previously stored in a memory device (Column 15, lines 25-27 explain that the image was stored in memory 17, meaning that the information is obtained from data that was stored in a memory device.).

**Regarding claim 4**, Murakami discloses a method according to claim 3, comprising, while displaying the image on the matrix display supplying information on

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defective pixels to a user, based on the stored data (The image was stored in the memory 17, and then the image is displayed to the user, and while displaying the previously stored image, information about defective pixels is supplied to a user as explained in column 15, lines 9-20 and 25-40.).

**Regarding claim 8**, Murakami discloses a method according to claim 1, wherein the information on the presence of defective pixels is obtained by means of an image capturing device (Column 13, lines 6-17. Since the image is obtained by a scanner, i.e. image capturing device, and then the image is analyzed for defective pixels, the presence of the defective pixels is obtained by scanning in the image.).

**Regarding claim 9**, this claim is rejected under the same rationale as claim 1.

**Regarding claim 10**, this claim is rejected under the same rationale as claim 3.

**Regarding claim 11**, this claim is rejected under the same rationale as claim 4.

**Regarding claim 15**, this claim is rejected under the same rationale as claim 1.

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

10. Claims 6-7 and 13-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Murakami (US 5,982,946) in view of Johnson et al. (US 2004/0164939).

***Regarding claim 6***, Murakami discloses a method according to claim 1.

Murakami fails to teach that that the method further comprises showing the displayed image so that defective pixels are not located in a region of interest.

Johnson et al. disclose a method comprising showing a displayed image so that defective pixels are not located in a region of interest (Paragraph [0027] explains that if only part of the image is active that the active part avoids the weak diode, i.e. the image is shifted out of the region where the defect is.).



Therefore, it would have been obvious to “one of ordinary skill” in the art at the time the invention was made to show the displayed image so that the defective pixels would not be located in a region of interest as taught by Johnson et al. with the method taught by Murakami in order to allow for the proper viewing of the image without any defects in the image being viewable.

***Regarding claim 7***, Murakami discloses a method according to claim 1.

Murakami fails to teach that that the method further comprises shifting the displayed image so that a defective pixel is located in a flat image area.

Johnson et al. disclose a method comprising shifting a displayed image so that a defective pixel is located in a flat image area (Paragraph [0027] explains that if only part of the image is active that the active part avoids the weak diode, i.e. the image is shifted out of the region where the defect is, and since the display is flat, this will be a flat image area.).

Therefore, it would have been obvious to “one of ordinary skill” in the art at the time the invention was made to shift the displayed image so that the defective pixels would be located in a flat image area as taught by Johnson et al. with the method taught by Murakami in order to allow for the proper viewing of the image without any defects in the image being viewable.

***Regarding claim 13***, this claim is rejected under the same rationale as claim 6.

***Regarding claim 14***, this claim is rejected under the same rationale as claim 7.

***Conclusion***

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Suzuki (US 5,289,174) discloses in which information on defective pixels is obtained and the defective pixel is adjusted.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen G. Sherman whose telephone number is (571) 272-2941. The examiner can normally be reached on M-F, 8:00 a.m. - 4:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amr Awad can be reached on (571) 272-7764. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

SS

17 June 2007

AMR A. AWAD  
SUPERVISORY PATENT EXAMINER  
